Quality Control

Work Order Thursday, July 14,								_				Page 1
Revision ID:  Item Name: Br	3531-1 racket 14/2011 22/2011	Start Qty: 000 Req'd Qty: 000		Accept	Cust Item I Customer:				Setup	Start Stop		
Approvals: P	Process Plan	n:	Date://////	Tooling: SPC (Y/N):		ite:			Run	Start Stop		
Sequence ID/ Work Center ID		Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	t Rej Qty		Reject Number	Insp. Stamp
Draw Nbr	Revi	ision Nbr										<u> </u>
D3531	Rev	A										
Waterjet FLOW CNC Waterjet		FLOW WATER JET  Memo 1-Cut as p Deburr if	er Dwg D3531 □Dwg Rev: necessary	0.00 A 0.00 A A □Prog Rev:_	H 11/07/2	28		15				·
QC Quality Control		QC2- Inspect parts off  Memo	machine FAI/FAIB	0.00 0.00 A	7 11/07/2	8		15				
120 		QC8- Inspect parts - so	econd check	0.00				_M	/_	ツ	07	28 (5

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W/O:			WO	RK ORDER CHAI	NGES						
DATE	STEP	PRO	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No	•	PAR #:	Fault Cate	jory:	NCR:	Yes N	o <b>DQ</b>	A:	_ Date: _		
	R	esolution:	Disposition	);	QA: N	/C Clos	sed:		Date: _	<del></del>	
NCR:			WORK ORDER NON-CONFORMANCE (NCR)								
DATE	STEP	Description of NC			Section B		Verific	ation	Approval	Approval	
UAIE	SIEP	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Secti		Chief Eng	QC Inspector	
		,									

### Work Order ID 71977

Thursday, July 14, 2011 3:11:20 PM



Page 2

Item ID:

D3531-1

Accept



Setup Start



**Revision ID:** 

**Start Date:** 

Item Name:

Bracket

7/14/2011

Start Qty: 6.00

Required Date: 7/22/2011

Req'd Qty: 6.00



**Cust Item ID:** 

**Customer:** 

Reference:

**Approvals:** 

Process Plan:

Date:\_\_\_\_\_ Tooling:

Date:

SPC (Y/N):

Date:

Date:

Tool # Plan

Code

Run

Start

Stop

Reject

**Qty** 

Stop

Number Stamp

Insp.

Sequence ID/ Work Center ID

130

Brake NC

Brake NC

Operation **Description** 

NC BRAKE

Memo

Bend as per Dwg D3531

Set Up/

**Run Hours** 

0.00

SB 11/07/29

**Tool ID** 

Accept

Qty

Reject

140

Quality Control

QC5- Inspect part completeness to step on W/O

0.00

0.00

W08/17

150

HandFinish

Hand Finishing

Chemical Conversion Coat per QSI005 4.1

0.00

Memo

Memo

0.00

15 d ll 4/08/00

W/O:		WORK ORDER CHANGES											
DATE	STEP	PROC	EDURE CH	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC inspector					
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Part No		PAR #:	_ Fault Ca	tegory:	_ NCR: Yes	No DQ	A:	Date: _					
Resolutio		esolution:	_ Disposit	ion:	_ QA: N/C (	Date: _							
NCR:		W	ORK OR	DER NON-CONFORMA	NCE (NC	R)							
DATE	STEP	Description of NC Section A	Corrective Action Initial Action Descr		Section B		cation	Approval Chief Eng	Approval Conspector				
			Chief Eng	Chief Eng	Dat	<b>e</b>							
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### Work Order ID 71977

mursday, July 14, 2011 3:11:20 PM



Page 3

Item ID:

D3531-1

Accept

Setup Start

Stop



**Revision ID:** 

Item Name:

Bracket

**Start Date:** 7/14/2011

Start Qty: 6.00

Required Date: 7/22/2011

Req'd Qty: 6.00



**Cust Item ID:** 

**Customer:** 

Reference:

Approvals:

Sequence ID/

Process Plan:

Date:

**Tooling:** 

Date:

Run

Start

Stop



Date:

SPC (Y/N):

Date:

Accept

Reject

Insp.

Work Center ID

160

Quality Control

Operation Description

QC3- Inspect Part Finish

Memo

Set Up/ **Run Hours** 

0.00

0.00

**Tool ID** 

Tool # Plan Code

Qty

Reject Qty

Number Stamp

170

Packaging

Packaging

Identify as per dwg & Stock Location:

0.00

Memo

0.00

180

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Dail Aci	Uspace	Liu							
W/O:			WO	RK ORDER CHAN	GES		•		***************************************
DATE	STEP	PRO	OCEDURE CHAI	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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Part No	<u>                                     </u>	PAR #:	Fault Cated	norv:	NCR: Yes	No <b>DQ</b>	 A:	Date:	:
		esolution:							
NCR:			WORK ORDE	R NON-CONFORM	MANCE (NC	R)			
DATE	STEP	Description of NC Section A	Initial	Corrective Action S Action Description	ection B n Sign	l& Sect	cation	Approval Chief Eng	Approval - QC Inspector
			Chief Eng	Chief Eng	Dat	e			

### **Picklist Print**

Thursday, July 14, 2011 3:11:28 PM

Work Order ID: 71977

Parent Item: D3531-1

Parent Item Name: Bracket



Start Date: 7/14/2011

Required Date: 7/22/2011

Page 1

Start Qty: 6.00

Required Qty: 6.00

**Comments:** 

IPP Rev:A New Issue 07-09-24 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040		Purchased	No			100	sf	105.5000	0.3783	2.389263			
										• ***			

6061-T6 .040 Sheet

<b>Location</b>	Loc Qty	Loc Code
MAT021	105.5	
113004	9.5	
117653	96	

7.2 AD 11/07/28 ··

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W/O:			W	ORK ORDER CHANGE	S				ļ	
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
			· · · ·							
i										
Part No	:	PAR #:	Fault Cate	egory:	NCR: Yes	No <b>DQ</b>	A:	_ Date: _		
	R	esolution:	Dispositio	on:	QA: N/C Cld	sed:		Date: _		
NCR:		V	WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval	
DAIL	SILI	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	ion C	Chief Eng	QC Inspector	
									-	

DART AEROSPACE LTD	Work Order:	
Description: Bracket	Part Number:	D3531-1
Inspection Dwg: D3531 Rev: A		Page 1 of 1

## FIRST ARTICLE INSPECTION CHECKLIST

X First Article	Prototype
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Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.196	+0.005/-0.001	0196			RAZB	dem
Ø0.129	+0.005/-0.001	0.129			N	
0.33	+/-0.030	,334			RAZL	Jen
2.840	+/-0.010	2.847			N	
1.70	+/-0.030	1.703			RAZL	Sim
1.45	+/-0.030	\$1.460			ιι	11
0.38	+/-0.030	,379			n	
0.19	+/-0.030	.202	<b>ب</b> ن	·	t 1	
5.88	+/-0.030	51870			M	
12.66	+/-0.030	12,64	\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-\-		RAOY	TAPE
0.600	+/-0.010	1605			RAZE	Vem
1.77	+/-0.030	1177			RAZG	Viem
1.24	+/-0.030	1.24			11	
1.16	+/-0.030	1.16	_/		RAOY	TAPE
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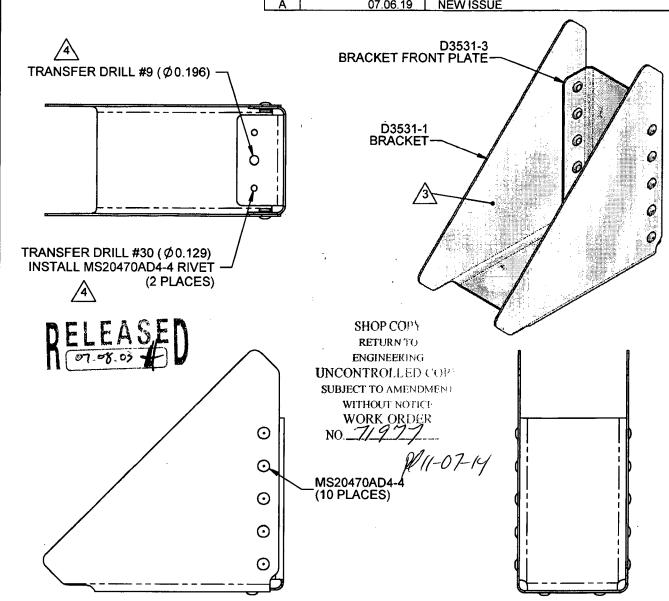
		// /		
Measured by:	Audited by:	NIM	Prototype Approval:	N/A
Date: ///07/28	Date:	11.01.28	Date:	N/A

	Rev	Date	Change	Revised by	Approved
	Α	07.10.15	New Issue	KJ/EC/DD	
٠					•

	Johase								
W/O:			W	ORK ORDER CHANGE	S				
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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							<u> </u>		
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	_ Date: _	
Resolution:		Disposition	n:	QA: N/C CI	osed:				
NCR:			WORK ORD	ER NON-CONFORMA	NCE (NCF	R)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation		Approval
DATE	SIEF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Secti	ion C	Chief Eng	QC Inspector
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DESIG	N	DRAWN BY	DART AEROSPACE	LTD
	B	CR	HAWKESBURY, ONTARIO, CAN	NADA
CHEC	KED	APPROYED	DRAWING NO.	REV. A
	E	9#	D3531	SHEET 1 OF 3
DATE			TITLE	SCALE
	07.0	06.19	BRACKET ASSEMBLY	1:2
REV		DATE	DESCRIPTION	
Α		07.06.40	NEWICCHE	



### **D3531-041 BRACKET ASSEMBLY**

NOTES:
1) FINISH: POWDER COAT ASSEMBLY BLACK SANDTEX (4.3.5.7) PER DART QSI 005 4.3 ALL PARTS

2) ASSEMBLE PER DART QSI 003 3) IDENTIFY WITH DART P/N "D3531-041" USING WHITE MARKER ON INSIDE OF BRACKET

ASSEMBLY, WHERE INDICATED
4) TRANSFER DRILL HOLES FROM D3531-1 BRACKET THROUGH D3531-3 BRACKET FRONT PLATE **BEFORE FINISHING** 

### PARTS LIST

QTY.	P/N	DESCRIPTION
Х	D3531-041	BRACKET ASSEMBLY
1	D3531-1	BRACKET
1	D3531-3	BRACKET FRONT PLATE
12	MS20470AD4-4	RIVET

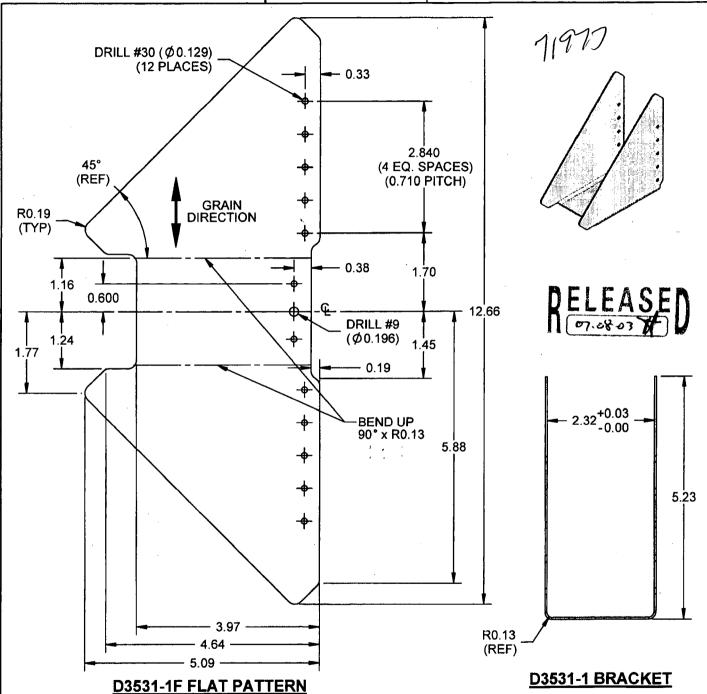
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W/O:			WC	ORK ORDER CHANGE	ES		· · · · · · ·		
DATE	STEP	PRO	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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		*							
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Part No	:	PAR #:	Fault Cate	gory:	NCR: Ye	s No DO	2A:	Date: _	
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NCR:		\	WORK ORD	ER NON-CONFORMA	NCE (NC	R)			
DATE	CTED	Description of NC		Corrective Action Section		Verif	ication		Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sig: Da	1&r∣ <sub>Sec</sub>	ction °C	Chief Eng	QC Inspector
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DESIGN CB	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CAI	
CHECKED	APPROVED	D3531	REV. A SHEET 2 OF 3
DATE 07.0	06.19	BRACKET ASSEMBLY	SCALE 1:2



**NOTES** 

1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED

5) BREAK ALL SHARP CORNERS TO 0.010 MAX

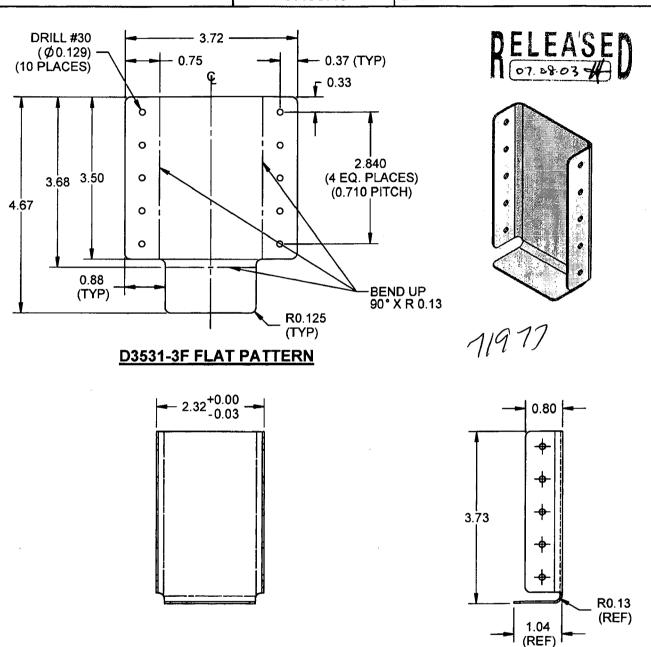
6) PART IS SYMMETRIC ABOUT &

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W/O:			W	ORK ORDER CHANG	ES	-			
DATE	STEP	PRO	CEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
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							•		
Part No		PAR #:	_ Fault Cate	egory:	NCR: Yes	No DQA:	·	Date: _	
		esolution:	Disposition	on:	_ QA: N/C CI	osed:		Date: _	
NCR:		V	ORK ORE	DER NON-CONFORMA	NCE (NCR	)			
DATE	CTED	Description of NC		Corrective Action Section		Verifica	ition		Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section		Chief Eng	QC Inspector
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DESIGN	DRAWN BY	DART AEROSPACE HAWKESBURY, ONTARIO, CA	
CHECKED	APPROVED	DRAWING NO.	REV. A SHEET 3 OF 3
DATE 07	.06.19	TITLE BRACKET ASSEMBLY	SCALE 1:2



# **D3531-3 BRACKET FRONT PLATE**

NOTES:
1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
5) BREAK ALL SHARP CORNERS TO 0.010 MAX
6) DART IS SYMMMETRIC AROUT (6)

6) PART IS SYMMETRIC ABOUT &

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W/O:			W	ORK ORDER CHANGE	ES					
DATE	STEP	PRO	OCEDURE CH	ANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
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Part No:		PAR #:	Fault Cat	egory:	NCR: Yes	No DQ	A:	Date: _		
•			Dispositi	on:	QA: N/C Closed:			d: Date:		
NCR:		\	WORK ORI	DER NON-CONFORMA	NCE (NCF	R)				
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation		Approval	
DAIL	JILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign 8 Date	Sect	ion C	Chief Eng	QC Inspector	
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